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09/649,461	08/25/2000	Rick L. Allison	1322/51	7020
25297	7590	03/30/2004	EXAMINER	
JENKINS & WILSON, PA 3100 TOWER BLVD SUITE 1400 DURHAM, NC 27707			SHARMA, SUJATHA R	
			ART UNIT	PAPER NUMBER
			2684	23

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/649,461

**Applicant(s)**

ALLISON ET AL.

**Examiner**

Sujatha Sharma

**Art Unit**

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36,39-49 and 52-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36,39-49 and 53-69 is/are rejected.
- 7) ☒ Claim(s) 52 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 52 is objected to because of the following informalities: Claim 52 depends on claim 51, which has been canceled. Appropriate correction is required. Accordingly, claim 52 has not been further treated on the merits.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2-4,7,8,12-17,20,21,25-27,32,34-36,39,40,45-49,55-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Sladek [US 6,622,016].

Regarding claim 1,14,26,34,45,57, Sladek discloses a method and system for controlled provisioning of telecommunication services. Sladek further discloses a method comprising:

- receiving a plurality of call signaling messages is received at a telecommunication network element (128 in Fig.3).
- screening at the telecommunication network element, the call signaling messages exchanged between a home location register (HLR) and a visitor location register (VLR) that relate to changes in location of mobile subscribers; See summary of invention and col. 13, line 54 – col. 6, line 30, col. 14, line 57- col. 15, line 5;

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- correlating the screened mobile call signaling messages based on atleast one parameter in the mobile call signaling message to identify mobile call signaling messages in a dialogue between the HLR and VLR and that relates to change in location of a particular mobile subscriber; see summary of invention and col. 13, line 54 – col. 6, line 30, col. 14, line 57- col. 15, line 5;
- generating a location change and sent to SMSC which further generates an SMS message and send it to the subscriber. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10.

See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claim 2-4,15-17,55,56, Sladek further discloses a method of receiving plurality of call signaling messages including receiving a mobile application part (MAP) update location request message. See col. 13, line 54 – col. 15, line 33.

Regarding claims 7,20, Sladek further discloses the message parameters to include mobile directory number (MDN). See col. 13, lines 34-53.

Regarding claims 8,21 Sladek further discloses the message parameters to include international mobile station identity directory (IMSI). See col. 13, lines 34-53.

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Regarding claims 12, Sladek further discloses the SMS message to be either an information message or a welcome message. See col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58 and col. 5, lines 12-31.

Regarding claims 13,25,27, Sladek further discloses a method of correlating the screened mobile call signaling messages based on a dialogue ID (such as registration) in the mobile call signaling messages. See summary of invention, col. 14, line 11 – col. 15, line 33, col. 16, lines 1-39.

Regarding claim 32, Sladek discloses a method wherein the change in location of the subscriber is generated and sent to SMSC. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 35,36,46,47 Sladek further discloses the telecommunications network element to comprise of a signal transfer point / signaling gateway routing node (128 in Fig.3).

Regarding claims 39,48, Sladek discloses the telecommunications network element to comprise of visitor location register (VLR). See Fig. 3

Regarding claims 40,49, Sladek discloses the telecommunications network element to comprise of home location register (HLR). See Fig. 3.

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Regarding claims 58 and 59, Sladek further discloses message-processing platform that is adapted to send the change in location indication message to a short message service center/presence server. See column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 60-63, Sladek further teaches the method of call routing from a signal transfer point to appropriate destination based on call signaling messages. See Fig. 3, column 6, lines 17-24, column 8, lines 11-42; see summary of invention, col. 14, line 57- col. 15, line 18, col. 16, lines 26-29, col. 17, lines 29- col. 18, line 10. See also col. 3, line 61 – col. 4, line 31, col. 5, lines 12-58.

Regarding claims 64-69, Sladek further discloses a method of receiving plurality of call signaling messages including receiving a mobile application part (MAP) update location request message. See col. 13, line 54 – col. 15, line 33.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5,6,9,11,18,19,22,24,41-44,53,54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Baker [US 6,505,046].

Regarding claims 5,6,18,19, Sladek does not disclose the message parameters to include HLR/VLR identification.

Baker further discloses HLR identification and VLR identification as one of the message parameters used to generate the change in location indication message. See column 8, lines 11-25.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Baker in order to route the messages accurately to the proper destination terminal.

Regarding claims 9,22 Baker further discloses the message parameters to include mobile the MSCID. See column 8, lines 11-25.

Regarding claims 11,24 Baker further discloses the SMS message to be either an information message or a welcome message. See column 8, lines 30-36, lines 61-65.

Regarding claim 41, Baker further discloses that owners of the subscriber's HLR and the first network element are not the same. See Fig.3 and column 6, lines 1-61.

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Regarding claims 42,43,53,54 Baker further discloses message-processing platform contained within the first network element WSN. See column 6, lines 1-61 and Fig.3

Regarding claim 44, Baker further discloses message-processing platform WSN associated with the first network element that is adapted to correlate and examine the parameters of the mobile call signaling message and generate a notification to the subscriber by means of SMS. See Fig.3 and column 6, line 1- column 7, line 50, column 8, lines 11-42.

5. Claims 10,23,28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Jung [DE 198 05 261 A].

Regarding claims 10 and 23, Sladek does not disclose the date and time as one of the message parameters. See pages 3 and 6.

Jung teaches the use of date and time as one of the message parameters. See pages 3 and 6.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Jung in order to ensure an accurate up-to-date location information is maintained on mobile stations.

Regarding claim 28, Jung further discloses a method to determine if the subscriber is in a foreign network based on HLRID and VLRID. See abstract.

Regarding claims 29 and 30, Jung further discloses a method where the correlation process for the mobile call signaling messages continues when subscriber roams in a foreign

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network and further the correlation process is stopped when the subscriber is not roaming in the foreign network. See pages 3-6.

Regarding claim 31, Jung further discloses a method of:

- (a) determining whether a mobile call location update record is active; see page 6.
- (b) in response to determining that a mobile call location update record is active for the message, storing the message in the mobile call location update record; see page 6.
- (c) in response to determining that a mobile call location update record is not active for the message, creating a new mobile call location update record and storing the message therein. see page 6.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sladek [US 6,622,016] in view of Brown [EP 710 043 A1].

Sladek as treated in claim 26, does not disclose a method where the location update record is discarded after failing to produce call signaling messages to complete update location record in a given time.

Brown discloses a method where the location update message is sent periodically within a pre-determined amount of time. See page 7, lines 27-34.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sladek with the above teaching from Brown in order to ensure up-to-date location information is maintained on mobile stations.

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***Response to Arguments***

7. Applicant's arguments with respect to claims 1-36,39-49,52-69 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McCann [US 6,662,017]      Methods and systems for routing messages associated with ported subscribers in a mobile communication network

Olsson [US 5,915,222]      Transporting short message service (SMS) messages within a telecommunication network

Bhatia [US 6,052,591]      Broadcasting messages to mobile station within a geographic area

Hasan [US 5,724,658] Call routing to wireless roamers in mobile telecommunication systems

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sujatha Sharma  
MARCH 22, 2004

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER